## MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

### **BTU International**

**Massachusetts Manufacturing Extension Partnership** 

**Btu International Collaborates On Continuous Improvement** 

#### **Client Profile:**

BTU International is the leading supplier of thermal processing solutions to global electronics and materials markets. BTU provides products and support to diverse markets, including PCB assembly, semiconductor packaging, and advanced materials. The company produces thick film, electronic components, ceramics, and metal processing applications, and additionally manufactures custom systems for specific customer applications, typically requiring high temperatures and precise atmosphere control. BTU is headquartered in state-of-the-art manufacturing facilities located in North Billerica, Massachusetts, and employs less than 250 people. The company also maintains a network of direct sales and service offices in the United States, Asia, and Europe.

#### Situation:

BTU International was one of five companies, each a member of the Boston Area Semiconductor Equipment Council, to participate in a Collaborative Continuous Improvement Training program subsidized by a Massachusetts Work Force Training Fund Grant. Each company sent a team of up to eight members to collaborative workshops designed to introduce and implement lean improvements in their respective companies. The workshops are facilitated by the Massachusetts Manufacturing Extension Partnership (MassMEP), a NIST MEP network affiliate.

#### Solution:

MassMEP provided training workshops that included Lean 101 using TimeWise training, Value Stream Mapping, Workplace Organization, Cellular Flow, and Kaizen Management. Each company then selected a specific pilot project in its respective facility and participated in a three-day kaizen activity implementing what they had learned in the collaborative workshops. BTU selected a pilot project centered around its fully enclosed coil heater fabrication process.

The BTU team, working with MassMEP, conducted a value stream mapping exercise and discovered opportunities for improvement in workplace organization and cellular flow. The company elected to complete 5S and cell design kaizens. With MassMEP's assistance, BTU redesigned and cleaned up the coil heater production area to reclaim much-needed floor space and reduce cycle times. The company also set-up a kanban system with its key supplier. BTU realized an annualized savings of \$130,000 as a result of this project.



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#### Results:

Reduced required floor space from 4500 square feet to 2700 square feet, a 40 percent decrease.

Redesigned the work cell to improve flow and reduce worker/material travel distance.

Saving \$130,000 annually based on volumes of 2000 units per year.

#### **Testimonial:**

"The Massachusetts Manufacturing Extension Partnership's Lean Manufacturing Training Workshop was grounded in reality. It provided reality-based examples and hands-on workshops. The course content was easy to follow, and the instructors provided professional guidance. Most impressive was the three day kaizen blitz...It was fun and produced documented results."

Louis Insalaco, Manufacturing Unit Manager

